511,511,001

## **WEST Search History**



DATE: Friday, October 08, 2004

Hide?	<u>Set</u> Name	Query	<u>Hit</u> Count
	DB=US	SPT, USOC, EPAB, JPAB, DWPI, TDBD; PLUR=YES; OP=OR	Count
	L14	L13	30
DB=PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD; PLUR=YES; OP=OR			
	L13	L12 near20 110	56
e man	L12	(amino or carboxy or carboxyl or NH or N or C)near2(terminus or terminal)	152969
	L11	L10 near20 (sandwich\$)	0
	L10	(chimer\$)near3(G-alpha or G or GPA1 or alpha)	961
	L9	(chimer\$)near3(G\$)near2(protein\$)	345
	L8	L7 and 16	14
	L7	(cadus)near3(pharmac\$)	39
	L6	L5 and (sandwich\$ or C-termin\$ or N-termin\$)	40
	L5	L4 and pheromone\$	41
	L4	L3 and (GPA1)	41
	L3	L2 and chimer\$	45
	L2	L1 and (broach or manfredi or paul or klein or murphy or xu or benegal)	76
	L1	cadus	208

END OF SEARCH HISTORY

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(FILE 'HOME' ENTERED AT 11:20:06 ON 08 OCT 2004)
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FILE 'STNGUIDE' ENTERED AT 11:20:13 ON 08 OCT 2004

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FILE 'CAPLUS, EMBASE, BIOSIS, MEDLINE, WPIDS' ENTERED AT 11:20:26 ON 08
     OCT 2004
L1
            526 S (BROACH, J? OR BROACH J?)/AU, IN
            263 S (MANFREDI, J? OR MANFREDI J?)/AU,IN
L2
           4536 S (PAUL, J? OR PAUL J?)/AU, IN
L3
              4 S (TRUEHART, J? OR TRUEHART J?)/AU, IN
           4027 S (KLEIN, C? OR KLEIN C?)/AU,IN
           3150 S (MURPHY, A? OR MURPHY A?)/AU, IN
L7
          22283 S (XU, J? OR XU J?)/AU, IN
              2 S (BENEGAL, A? OR BENEGAL A?)/AU,IN
L8
L9
              0 S (CADUS) (2A) (PHARMAC?)
          34640 S L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8
L10
L11
             58 S L10 AND PHEROMON?
L12
             13 S L11 AND CHIMER?
L13
             11 DUP REM L12 (2 DUPLICATES REMOVED)
             0 S (SANDWICH) (3A) (CHIMERA?) (10A) (GPA1 OR G-ALPHA OR G-PROTEIN?)
L14
              0 S (SANDWICH) (3A) (CHIMER?) (10A) (GPA1 OR G-ALPHA OR G-PROTEIN?)
             90 S (TERMINUS OR TERMINAL OR N-TERMIN? OR C-TERMIN? OR CARBOXY? O
             0 S L16 AND BRADYKIN?
L18
             45 DUP REM L16 (45 DUPLICATES REMOVED)
L19
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FILE 'STNGUIDE' ENTERED AT 11:32:09 ON 08 OCT 2004

4 S L18 AND PHEROMON?

7 S L31 AND G-PROTEIN?

4 DUP REM L33 (3 DUPLICATES REMOVED)

FILE 'CAPLUS, EMBASE, BIOSIS, MEDLINE, WPIDS' ENTERED AT 11:33:28 ON 08 OCT 2004

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1064 S (CHIMER?) (10A) (GPA1 OR G-ALPHA OR G-PROTEIN?)
L20
L21
             11 S L20 AND BRADYKIN?
L22
              7 DUP REM L21 (4 DUPLICATES REMOVED)
L23
             40 S (C-TERMIN? OR CARBOXY?) (5A) (CHIMER?) (10A) (GPA1 OR G-ALPHA OR
L24
             22 DUP REM L23 (18 DUPLICATES REMOVED)
L25
           1699 S (C-TERMIN? OR CARBOXY?) (5A) (CHIMER?)
L26
              5 S L25 AND PHEROMON?
L27
              0 S L25 AND SOMATOSTATIN? AND BRADYKIN?
L28
             13 S L25 AND BRADYKIN?
              4 DUP REM L28 (9 DUPLICATES REMOVED)
L30
           1161 S L25 AND (N-TERMIN? OR AMINO)
L31
            73 S L30 AND YEAST
L32
             0 S L31 AND HETEROLOG?
```

=>

L33

L34

- L19 ANSWER 1 OF 4 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
- AN 2000044094 EMBASE
- Functional coupling of mammalian receptors to the yeast mating pathway using novel yeast/mammalian G protein  $\alpha$ -subunit chimeras.
- AU Brown A.J.; Dyos S.L.; Whiteway M.S.; White J.H.M.; Watson M.-A.E.A.; Marzioch M.; Clare J.J.; Cousens D.J.; Paddon C.; Plumpton C.; Romanos M.A.; Dowell S.J.
- CS M.A. Romanos, Molecular Pharmacology Unit, Gla Wellcome Research Development, Medicines Research Centre, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY, United Kingdom. mar11767@glaxowellcome.co.uk
- SO Yeast, (15 Jan 2000) 16/1 (11-22). Refs: 29
- ISSN: 0749-503X CODEN: YESTE3
  CY United Kingdom
- DT Journal; Article
- FS 004 Microbiology 029 Clinical Biochemistry
- LA English
- SL English

=>

AΒ The expression of mammalian G protein coupled receptors (GPCRs) in S. cerevisiae provides a powerful assay system for functional analysis, ligand identification and pharmaceutical screening. However, relatively few receptors have been coupled to the pheromone response pathway via the yeast G(a), Gpalp, or chimeric yeast/mammalian G(a) subunits containing long C-terminal regions of mammalian G(a) proteins. We tested an extended range of seven such chimeras for G(a) sub-types of three major classes (G(ai/o), G(as) and G(aq)), against eight human GPCRs (SST2, SST5, 5-HT(1A), 5-HT(1Da), ML(1B), P2Y1 and P2Y2). Although the G(ai/o) chimeras increased the range of receptors that coupled efficiently, the G(as) and G(aq) chimeras were inactive when expressed using the GPA1 promoter. We describe 10 novel Gpa1p chimeras, designated 'transplants', in which the Cterminal five amino acids of Gpalp were exchanged with mammalian residues. Coupling efficiency and ligand sensitivity improved significantly using the transplants. For the P2Y purinergic receptors, coupling could only be detected with the transplants; this is the first report of G(q) specificity coupling in yeast. Thus, the transplants offer major advantages over previously described approaches, in terms of both the range of receptors coupled and the efficiency of coupling. Copyright 2000 John Wiley and Sons, Ltd.

## > d 19 bib, ab

- L24 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 7
- AN 1997:256486 CAPLUS
- DN 126:325648
- TI A novel system that reports the G-proteins linked to a given receptor: a study of type3 somatostatin receptor
- AU Komatsuzaki, Katsumi; Murayama, Yoshitake; Giambarella, Ugo; Ogata, Etsuro; Seino, Susumu; Nishimoto, Ikuo
- CS Cardiovascular Research Center, Massachusetts General Hospital, Department of Medicine, Harvard Medical School, Charlestown, MA, 02129, USA
- SO FEBS Letters (1997), 406(1,2), 165-170 CODEN: FEBLAL; ISSN: 0014-5793
- PB Elsevier
- DT Journal
- LA English

receptor.

AB SSTR3, a somatostatin (SST) receptor, is an adenylyl cyclase (AC)-inhibiting receptor. To assign the G-protein  $\alpha\text{-subunit}$  $(G\alpha)$  linked to this receptor, we created a novel reporter system which utilizes the well-established facts that the C-terminal 5 residues of  $G\alpha$  are the receptor contact site and  $G\alpha s$  stimulates all subtypes of AC. We constructed chimeric G. alpha.s the C-terminal 5 residues of which were replaced with the corresponding C-terminus of each known  $G\alpha$ , and examined which chimera confers SSTR3-induced activation of AC. Cellular transfection of SSTR3 and measurement of SST-dependent AC activity through co-transfected chimeric  $G\alpha s$  revealed that SSTR3 recognizes the C-termini of  $G\alpha i1/2$  but not of  $G\alpha o$  or  $G\alpha z$ , and those of  $G\alpha 14$  and  $G\alpha 16$ , but not of  $G\alpha q$  or  $G\alpha 11$ . As predicted by the chimeric  $G\alpha s$ , SST-bound SSTR3 stimulated polyphosphoinositide turnover only when  $G\alpha 16$  or  $G\alpha 14$  was co-transfected. We conclude that the chimeric Glphas system provides a new approach towards the assignment of G-proteins linked to a given